Recovery Plan Action Status

Plan Name: Recovery Plan for the Great Lakes population of Piping Plovers

Plan Status: Final Plan Date: 16-Sep-03 Lead Agency: USFWS

Lead Office: East Lansing Ecological Services Field Office 351-2555)

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Piping Plover (Charadrius melodus)	1	1.11	Coordinate survey, monitoring and management efforts in breeding range	Ongoing Current	FY 1995 - FY 1999		U.S. Fish and Wildlife Service, Ecological Services Division, Research Institutions, National Park Service, U.S. Fish and Wildlife Service, U.S. Forest Service, Land Management Agencies and Other Cooperators: This designation includes other local land management agencies (e.g., municipal and county governments), conservation organizations and land trusts (e.g., Little Traverse Conservancy, local and National Audubon Societies, Whitefish Point Bird Observatory), and private individuals that own or manage piping plover wintering or breeding habitat or assist in protection efforts., Michigan Department of Natural Resources, Ontario Ministry of Natural Resources, State Wildlife Management Agencies		Species Expert	Costs for travel to survey sites

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Piping Plover (Charadrius melodus)	1	1.12&1.21	Survey known, historic and potential breeding sites to locate breeding piping plovers	Ongoing Current	Prior to FY 1995		U.S. Fish and Wildlife Service, Ecological Services Division, Research Institutions, National Park Service, U.S. Fish and Wildlife Service, U.S. Forest Service, Land Management Agencies and Other Cooperators: This designation includes other local land management agencies (e.g., municipal and county governments), conservation organizations and land trusts (e.g., Little Traverse Conservancy, local and National Audubon Societies, Whitefish Point Bird Observatory), and private individuals that own or manage piping plover wintering or breeding habitat or assist in protection efforts., Michigan Department of Natural Resources		Internal Technical Assistance	

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Piping Plover Charadrius nelodus)	1	1.13	Identify survey coordinators and survey sites for other Great Lakes states and Ontario	Partially Complete	FY 1995 - FY 1999		U.S. Fish and Wildlife Service, Ecological Services Division, U.S. Fish and Wildlife Service, Land Management Agencies and Other Cooperators: This designation includes other local land management agencies (e.g., municipal and county governments), conservation organizations and land trusts (e.g., Little Traverse Conservancy, local and National Audubon Societies, Whitefish Point Bird Observatory), and private individuals that own or manage piping plover wintering or breeding habitat or assist in protection efforts., Ontario Ministry of Natural Resources, State Wildlife Management Agencies,		Species Expert	Initial cost to identify sites and coordinators; additional costs contingent on number of areas to be surveyed and existence of other funding.

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Piping Plover (Charadrius melodus)	1	1.14&1.15	Develop standard, range wide monitoring and reporting protocol; develop guidelines and conduct annual training workshops for seasonal piping plover monitors	Ongoing Current	FY 1995 - FY 1999		U.S. Fish and Wildlife Service, Ecological Services Division, National Park Service, U.S. Fish and Wildlife Service, U.S. Forest Service, Land Management Agencies and Other Cooperators: This designation includes other local land management agencies (e.g., municipal and county governments), conservation organizations and land trusts (e.g., Little Traverse Conservancy, local and National Audubon Societies, Whitefish Point Bird Observatory), and private individuals that own or manage piping plover wintering or breeding habitat or assist in protection efforts., Michigan Department of Natural Resources		Species Expert	Initial cost to develop protocol and produce manuals.Cost included in tasks 1.221, 1.222
Piping Plover (Charadrius melodus)	1	1.16	Continue to support a coordinator to oversee data collection, maintain databases, analyze field data and disseminate results	Ongoing Current	FY 1995 - FY 1999		U.S. Fish and Wildlife Service, Ecological Services Division, U.S. Fish and Wildlife Service		Graduate Student	

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Piping Plover (Charadrius melodus)		1.17	Develop agreements with private landowners and townships to allow monitoring and management efforts on private and municipal lands	Ongoing Current	FY 1995 - FY 1999		U.S. Fish and Wildlife Service, Ecological Services Division, U.S. Fish and Wildlife Service, Land Management Agencies and Other Cooperators: This designation includes other local land management agencies (e.g., municipal and county governments), conservation organizations and land trusts (e.g., Little Traverse Conservancy, local and National Audubon Societies, Whitefish Point Bird Observatory), and private individuals that own or manage piping plover wintering or breeding habitat or assist in protection efforts., State Wildlife Management Agencies, The Nature Conservancy		Internal Administrative	
Piping Plover (Charadrius melodus)	1	1.18	Develop and implement protection guidelines for unoccupied or historic breeding habitat on state and Federal lands via MOU/MOA	Planned	FY 2006		U.S. Fish and Wildlife Service, Ecological Services Division, National Park Service, U.S. Fish and Wildlife Service, Michigan Department of Natural Resources, Ontario Ministry of Natural Resources, State Wildlife Management Agencies, Canadian Wildlife Service	Management: Habitat Maintenance and Manipulation	Species Expert	

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Piping Plover (Charadrius melodus)	2	1.19	Organize and train volunteers to patrol nesting areas	Ongoing Current	FY 1995 - FY 1999		U.S. Fish and Wildlife Service, Ecological Services Division, U.S. Fish and Wildlife Service, Michigan Department of Natural Resources	Other: Information and Education	Volunteer	
Piping Plover (Charadrius melodus)	1	1.221&1.223	Protect nests with predator exclosures and signs/fencing; enforce dog leash laws	Ongoing Current	FY 1995 - FY 1999		U.S. Fish and Wildlife Service, Ecological Services Division, National Park Service, U.S. Fish and Wildlife Service, U.S. Fish and Wildlife Service, Law Enforcement Division, U.S. Forest Service, Land Management Agencies and Other Cooperators: This designation includes other local land management agencies (e.g., municipal and county governments), conservation organizations and land trusts (e.g., Little Traverse Conservancy, local and National Audubon Societies, Whitefish Point Bird Observatory), and private individuals that own or manage piping plover wintering or breeding habitat or assist in protection efforts., Michigan Department of Natural Resources	Management: Predator and Competitor Control	Internal Technical Assistance	

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Piping Plover (Charadrius melodus)	1	1.222	Protect nests with predator exclosures and signs/fencing; enforce dog leash laws	Ongoing Current	FY 1995 - FY 1999		U.S. Fish and Wildlife Service, Ecological Services Division, National Park Service, U.S. Fish and Wildlife Service, Land Management Agencies and Other Cooperators: This designation includes other local land management agencies (e.g., municipal and county governments), conservation organizations and land trusts (e.g., Little Traverse Conservancy, local and National Audubon Societies, Whitefish Point Bird Observatory), and private individuals that own or manage piping plover wintering or breeding habitat or assist in protection efforts., State Wildlife Management Agencies	Management: Predator and Competitor Control	Internal Technical Assistance	Assess need for predator removal annually. Final costs contingent on areas and numbers of predators

Piping Plover (Charadrius melodus) 2
Whitefish Point Bird Observatory), and private individuals that own or manage piping plover wintering or

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Piping Plover (Charadrius melodus)		1.225	control efforts in areas where likelihood of predation on piping plover adults and chicks is high	Ongoing Current	FY 2011		U.S. Fish and Wildlife Service, Ecological Services Division, National Park Service, U.S. Fish and Wildlife Service, U.S. Forest Service, Land Management Agencies and Other Cooperators: This designation includes other local land management agencies (e.g., municipal and county governments), conservation organizations and land trusts (e.g., Little Traverse Conservancy, local and National Audubon Societies, Whitefish Point Bird Observatory), and private individuals that own or manage piping plover wintering or breeding habitat or assist in protection efforts., Michigan Department of Natural Resources		Internal Technical Assistance	Assess need for predator removal and in certain circumstances and under certain conditions carry out predator removal.
Piping Plover (Charadrius melodus)	1	1.226	Implement merlin trapping program utilizing members of the Michigan Hawking Club	Ongoing Current	FY 2011		U.S. Fish and Wildlife Service	Management: Predator and Competitor Control	Volunteer	In this program, members of the Michigan Hawking Club (licensed falconers) live trap merlins (Falco columbarius) that pose a threat to piping plovers. This non-lethal control can help protect vital piping plover breeding areas.

Species Action Priority # Action # Action # Action Description Des	or Type Action Comments
Piping Plover (Charadrus melodus) 1	spe not yet d \$5K each year for breeding; \$3K for updates every 3 years after FY07.

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Piping Plover (Charadrius melodus)	1	1.32	Work to minimize development and encourage activities that prevent degradation or destruction of essential habitat on public lands in the breeding range	Ongoing Current	FY 1995 - FY 1999		U.S. Fish and Wildlife Service, Ecological Services Division, National Park Service, U.S. Fish and Wildlife Service, Land Management Agencies and Other Cooperators: This designation includes other local land management agencies (e.g., municipal and county governments), conservation organizations and land trusts (e.g., Little Traverse Conservancy, local and National Audubon Societies, Whitefish Point Bird Observatory), and private individuals that own or manage piping plover wintering or breeding habitat or assist in protection efforts., Michigan Department of Natural Resources, State Wildlife Management Agencies, U.S. Army Corps of Engineers, United States Coast Guard	Manipulation	Species Expert	Costs for FY4, FY5, FY 6 through 8 contingent on number of development projects
Piping Plover (Charadrius melodus)	1	1.33	Protect breeding population&FRom oil spills in Great Lakes waterways	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, U.S. Fish and Wildlife Service, State Wildlife Management Agencies, Canadian Wildlife Service	Management: Other	Species Expert	FY4, FY5, FY6 through 8 dependent on occurrence and magnitude of spills
Piping Plover (Charadrius melodus)	2	1.341&1.342	Incorporate protection of breeding areas into land use plans and existing permitting processes; develop HCP guidelines	Partially Complete	FY 2000 - FY 2004		U.S. Fish and Wildlife Service, Ecological Services Division, U.S. Fish and Wildlife Service	Management: Habitat Maintenance and Manipulation	Internal Technical Assistance	

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Piping Plover (Charadrius melodus)	3	1.35&2.23	Assess and foster compatibility of Great Lakes and wintering management with efforts that benefit other threatened and endangered species	Unknown			Wildlife Service, Ecological Services	Management: Habitat Maintenance and Manipulation	Internal Technical Assistance	
Piping Plover (Charadrius melodus)	3	1.361	Control vegetation and conduct cobble nourishment at marginal breeding sites when and where appropriate	Partially Complete	FY 1995 - FY 1999		Wildlife Service, Ecological Services	Habitat	Internal Field Assistance	Costs outlined for habitat enhancement only; habitat acquisition will incur additional costs depending on habitat to be purchased.

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Piping Plover (Charadrius melodus)	2	1.362&2.24	Purchase habitat (breeding and wintering) and increase protection through conservation easements, deed restrictions, etc.	Partially Complete	FY 2000 - FY 2004		National Park Service, U.S. Fish and Wildlife Service, U.S. Fish and Wildlife Service National Wildlife Refuge System, Land Management Agencies and Other Cooperators: This designation includes other local land management agencies (e.g., municipal and county governments), conservation organizations and land trusts (e.g., Little Traverse Conservancy, local and National Audubon Societies, Whitefish Point Bird Observatory), and private individuals that own or manage piping plover wintering or breeding habitat or assist in protection efforts., State Wildlife Management Agencies, The Nature Conservancy	Acquisition: General	Internal Administrative	FY4, FY5, FY6 ,FY7, through 8 cost dependent on number and area or purchases. Potential costs could exceed 2 million dollars.

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Piping Plover (Charadrius melodus)	1	2.11	Create a Wintering Grounds Coordination Group to organize protection efforts on piping plover s wintering range	Complete	FY 2000 - FY 2004	FY 2007	U.S. Fish and Wildlife Service, Ecological Services Division, National Park Service, U.S. Fish and Wildlife Service, Land Management Agencies and Other Cooperators: This designation includes other local land management agencies (e.g., municipal and county governments), conservation organizations and land trusts (e.g., Little Traverse Conservancy, local and National Audubon Societies, Whitefish Point Bird Observatory), and private individuals that own or manage piping plover wintering or breeding habitat or assist in protection efforts., State Wildlife Management		Species Expert	Functional group ir operation

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
iping Plover Charadrius lelodus)	1	2.12	Organize winter surveys to locate banded birds and identify key wintering areas for the Great Lakes population	Ongoing Current	FY 2000 - FY 2004		U.S. Fish and Wildlife Service, Ecological Services Division, National Park Service, U.S. Fish and Wildlife Service, U.S. Fish and Wildlife Service National Wildlife Refuge System, Land Management Agencies and Other Cooperators: This designation includes other local land management agencies (e.g., municipal and county governments), conservation organizations and land trusts (e.g., Little Traverse Conservancy, local and National Audubon Societies, Whitefish Point Bird Observatory), and private individuals that own or manage piping plover wintering or breeding habitat or assist in protection	Research: Population Surveys	Species Expert, Volunteer	

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Piping Plover (Charadrius melodus)	1	2.13	Monitor wintering populations at sites with sightings of birds banded in the Great Lakes	Ongoing Current	FY 2000 - FY 2004		U.S. Fish and Wildlife Service, Ecological Services Division, National Park Service, U.S. Fish and Wildlife Service, Land Management Agencies and Other Cooperators: This designation includes other local land management agencies (e.g., municipal and county governments), conservation organizations and land trusts (e.g., Little Traverse Conservancy, local and National Audubon Societies, Whitefish Point Bird Observatory), and private individuals that own or manage piping plover wintering or breeding habitat or assist in protection efforts., State Wildlife Management		Species Expert, Volunteer	

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Piping Plover (Charadrius melodus)		2.14	Reduce disturbance to piping plovers at wintering sites by humans and pets	Ongoing Current	FY 2000 - FY 2004		U.S. Fish and Wildlife Service, Ecological Services Division, National Park Service, U.S. Fish and Wildlife Service, Law Enforcement Division, U.S. Fish and Wildlife Service, Law Enforcement Division, U.S. Fish and Wildlife Service National Service Service National Service Service National Service Service National Audubon Societies, Whitefish Point Bird Observatory), and private individuals that own or manage piping plover wintering or breeding habitat or assist in protection efforts., State Wildlife Management Agencies		Internal Field Assistance	Costs shared by Atlantic Recovery plan
Piping Plover (Charadrius melodus)	1	2.15	Protect wintering populations&FRom oil spills	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, U.S. Fish and Wildlife Service, State Coastal Regulatory Agencies, State Wildlife Management Agencies, United States Coast Guard		Labor type not yet selected	FY4, FY5, FY6 through 8 contingent on number and magnitude of oil spills

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Piping Plover (Charadrius melodus)	1	2.16	Identify and reduce additional threats to winter populations	Ongoing Current	FY 1995 - FY 1999		U.S. Fish and Wildlife Service, Ecological Services Division, Research Institutions, National Park Service, U.S. Fish and Wildlife Service, U.S. Fish and Wildlife Service National Wildlife Refuge System, State Wildlife Management Agencies	Manipulation	Internal Field Assistance	
Piping Plover (Charadrius melodus)	1	2.21	Identify and update essential wintering habitat	Not Started			U.S. Fish and Wildlife Service, Ecological Services, Division, Research Institutions, National Park Service, U.S. Fish and Wildlife Service, Land Management Agencies and Other Cooperators: This designation includes other local land management agencies (e.g., municipal and county governments), conservation organizations and land trusts (e.g., Little Traverse Conservancy, local and National Audubon Societies, Whitefish Point Bird Observatory), and private individuals that own or manage piping plover wintering or breeding habitat or assist in protection efforts., State Wildlife Management		Labor type not yet selected	\$10K for wintering; \$3K for updates every 3 years after FY07.

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Piping Plover (Charadrius melodus)	1	2.22	Work to minimize impacts of development and encourage activities that will prevent degradation or destruction of essential wintering habitat	Ongoing Current	FY 2000 - FY 2004		U.S. Fish and Wildlife Service, Ecological Services Division, U.S. Fish and Wildlife Service, U.S. Federal Emergency Management Agency, U.S. Army Corps of Engineers, United States Coast Guard	Management: General	Internal Technical Assistance	FY4, FY5, FY6 through 8 contingent on number of development projects
Piping Plover (Charadrius melodus)	2	3.2	Target birding groups to locate migrating piping plovers	Ongoing Current	FY 2011		U.S. Fish and Wildlife Service, Ecological Services Division, National Park Service, U.S. Fish and Wildlife Service National Wildlife Service National Marine Fisheries Service Southwest Region, Land Management Agencies and Other Cooperators: This designation includes other local land management agencies (e.g., municipal and county governments), conservation organizations and land trusts (e.g., Little Traverse Conservancy, local and National Audubon Societies, Whitefish Point Bird Observatory), and private individuals that own or manage piping plover wintering or breeding habitat or assist in protection efforts., Ontario Ministry of Natural Resources	Research: Migration	Volunteer	Additional costs for site protection, depending on number and magnitude of sites and threats.

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Piping Plover (Charadrius melodus)	3	3.3	Identify and reduce threats to habitat and migrating piping plovers at key migration sites	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, National Park Service, U.S. Fish and Wildlife Service, Land Management Agencies and Other Cooperators: This designation includes other local land management agencies (e.g., municipal and county governments), conservation organizations and land trusts (e.g., Little Traverse Conservancy, local and National Audubon Societies, Whitefish Point Bird Observatory), and private individuals that own or manage piping plover wintering or breeding habitat or assist in protection efforts., Ontario Ministry of Natural Resources, State Wildlife Management Agencies, Canadian Wildlife Service		Labor type not yet selected	Additional costs for site protection, depending on number and magnitude of sites and threats.
Piping Plover (Charadrius melodus)	2	4.1	Continue to study survival, recruitment, dispersal, and ecology by color- banding Great Lakes population	Ongoing Current	Prior to FY 1995		U.S. Fish and Wildlife Service, Ecological Services Division, Research Institutions, U.S. Fish and Wildlife Service	Research: Demographic Studies	Species Expert	Re-evaluate need for continued banding after 2005; expenses are for travel and may be shared with tasks 1.21 and 1.221 if bander is involved in monitoring and management.
Piping Plover (Charadrius melodus)	3	4.211	Study biotic and abiotic factors that influence nesting densities	Partially Complete	FY 2000 - FY 2004		U.S. Fish and Wildlife Service, Ecological Services Division, Research Institutions, U.S. Fish and Wildlife Service	Research: Habitat Requirements	Graduate Student	

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Piping Plover (Charadrius melodus)	2	4.212	Quantify factors limiting piping plover use of current and historic breeding sites	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, U.S. Fish and Wildlife Service, Land Management Agencies and Other Cooperators: This designation includes other local land management agencies (e.g., municipal and county governments), conservation organizations and land trusts (e.g., Little Traverse Conservancy, local and National Audubon Societies, Whitefish Point Bird Observatory), and private individuals that own or manage piping plover wintering or breeding habitat or assist in protection efforts., State Wildlife Management Agencies		Labor type not yet selected	
Piping Plover (Charadrius melodus)	3	4.22	Investigate relationship of brood home range size to biotic and abiotic factors	Partially Complete	FY 2000 - FY 2004		U.S. Fish and Wildlife Service, Ecological Services Division, Research Institutions, U.S. Fish and Wildlife Service	Research: Habitat Requirements	Graduate Student	
Piping Plover (Charadrius melodus)	2	4.3	Quantify factors limiting piping plover use of current and historic breeding sites	Ongoing Current	FY 2011		U.S. Fish and Wildlife Service, Ecological Services Division, Research Institutions, U.S. Fish and Wildlife Service	Research: Habitat Requirements	Species Expert	

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Piping Plover (Charadrius melodus)	2	4.41	Continue to investigate winter distribution	Ongoing Current	FY 2000 - FY 2004		U.S. Fish and Wildlife Service, Ecological Services Division, National Park Service, U.S. Fish and Wildlife Service, U.S. Fish and Wildlife Service, U.S. Fish and Wildlife Service National Wildlife National Wildlife Service National Wildlife Service National Wildlife Service National Wildlife Service National Management Agencies (e.g., Lindlife Service) Conservation organizations and land trusts (e.g., Little Traverse Conservancy, local and National Audubon Societies, Whitefish Point Bird Observatory), and private individuals that own or manage piping plover wintering or breeding habitat or assist in protection efforts., State Wildlife Management Agencies		Graduate Student	Began in 2001.
Piping Plover (Charadrius melodus)	2	4.42	Characterize physical characteristics of wintering habitat	Partially Complete	FY 2000 - FY 2004		U.S. Fish and Wildlife Service, Ecological Services Division, Research Institutions, U.S. Fish and Wildlife Service	Research: Habitat Requirements	Graduate Student	

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Piping Plover (Charadrius melodus)	3	4.43	Determine spatial and temporal use of wintering habitat by piping plovers with focus on sites known to be used by Great Lakes population	Partially Complete	FY 2000 - FY 2004		U.S. Fish and Wildlife Service, Ecological Services Division, Research Institutions, National Park Service, U.S. Fish and Wildlife Service, Land Management Agencies and Other Cooperators: This designation includes other local land management agencies (e.g., municipal and county governments), conservation organizations and land trusts (e.g., Little Traverse Conservancy, local and National Audubon Societies, Whitefish Point Bird Observatory), and private individuals that own or manage piping plover wintering or breeding habitat or assist in protection efforts., State Wildlife Management Agencies	Research: Habitat Requirements	Graduate Student	
Piping Plover (Charadrius melodus)	2	4.51	Analyze contaminant residues in salvaged eggs and carcasses	Partially Complete	FY 2000 - FY 2004		U.S. Fish and Wildlife Service, Ecological Services Division, Research Institutions, U.S. Fish and Wildlife Service	Research: Environmental Contaminants	Species Expert	Cost contingent on number of samples and level of analysis.
Piping Plover (Charadrius melodus)	3	4.52	Analyze contaminant levels in prey at known wintering sites for Great Lakes population	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Research Institutions, U.S. Fish and Wildlife Service, U.S. Fish and Wildlife Service National Wildlife Refuge System	Acquisition	Labor type not yet selected	

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Piping Plover (Charadrius melodus)	2	4.53	Determine if registered pesticide use poses threat to breeding or wintering piping plovers or food base	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Research Institutions, U.S. Fish and Wildlife Service	Work type not yet selected	Labor type not yet selected	FY05-07 cost to compile data and produce reports.
Piping Plover (Charadrius melodus)	2	4.6	Investigate genetic variation within the Great Lakes population and among the three breeding populations	Partially Complete	FY 2000 - FY 2004		U.S. Fish and Wildlife Service, Ecological Services Division, Research Institutions, U.S. Fish and Wildlife Service	Research: Genetics	Graduate Student	
Piping Plover (Charadrius melodus)	3	4.7	Refine population viability models as new data become available	Ongoing Current	FY 2005		U.S. Fish and Wildlife Service, Ecological Services Division, Research Institutions, U.S. Fish and Wildlife Service	Research: Demographic Studies	Graduate Student	Contingent on availability of data.
Piping Plover (Charadrius melodus)	3	5.1	Develop and promote seasonal natural history programs for state parks and National Lakeshore users in Great Lakes region	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, National Park Service, U.S. Fish and Wildlife Service, Michigan Department of Natural Resources, State Wildlife Management Agencies	Work type not yet selected	Labor type not yet selected	

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Piping Plover (Charadrius melodus)	2	5.2	Conduct landowner contact and education programs to promote awareness of status and threats to piping plovers	Ongoing Current	FY 2000 - FY 2004		U.S. Fish and Wildlife Service, Ecological Services Division, U.S. Fish and Wildlife Service, Land Management Agencies and Other Cooperators: This designation includes other local land management agencies (e.g., municipal and county governments), conservation organizations and land trusts (e.g., Little Traverse Conservancy, local and National Audubon Societies, Whitefish Point Bird Observatory), and private individuals that own or manage piping plover wintering or breeding habitat or assist in protection efforts., The Nature Conservancy		Internal Field Assistance	
Piping Plover (Charadrius melodus)	3	5.3	Make educational presentations to citizen groups in communities in or near piping plover habitat	Ongoing Current	FY 1995 - FY 1999		U.S. Fish and Wildlife Service, Ecological Services Division, U.S. Fish and Wildlife Service		Species Expert	
Piping Plover (Charadrius melodus)	2	5.4	Prepare several press releases annually to apprise the public of the piping plover s special status, biology and management	Ongoing Current	FY 1995 - FY 1999		U.S. Fish and Wildlife Service, Ecological Services Division, U.S. Fish and Wildlife Service		Species Expert	
Piping Plover (Charadrius melodus)	3	5.5	Evaluate and improve current educational materials and methods of distributing them	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, U.S. Fish and Wildlife Service		Labor type not yet selected	

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Piping Plover (Charadrius melodus)	3	5.51	Develop, create and distribute educational and outreach materials (Great Lakes Piping Plover brochure)	Ongoing Current	FY 2011		U.S. Fish and Wildlife Service, Ecological Services Division, American Association of Zoological Parks and Aquariums, U.S. Fish and Wildlife Service	Other: Information and Education	Species Expert	Design a new Great Lakes Piping Plover brochure for education and outreach in partnership with the Detroit Zoo. Distribute this brochure to partners and to the public.
Piping Plover (Charadrius melodus)	2	5.6	Design a piping plover sign appropriate for use on privately-owned land	Complete	FY 2000 - FY 2004	FY 2000 - FY 2004	U.S. Fish and Wildlife Service, Ecological Services Division, U.S. Fish and Wildlife Service	Other: Information and Education	Internal Field Assistance	
Piping Plover (Charadrius melodus)	3	5.7	Evaluate and improve educational opportunities and materials in zoos	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, American Association of Zoological Parks and Aquariums, U.S. Fish and Wildlife Service	Work type not yet selected	Labor type not yet selected	
Piping Plover (Charadrius melodus)	3	6.1	Identify similar or overlapping conservation efforts by other agencies to reduce redundancy and increase complementarity	Ongoing Current	FY 1995 - FY 1999		U.S. Fish and Wildlife Service, Ecological Services, Ecological Services Division, U.S. Fish and Wildlife Service, Land Management Agencies and Other Cooperators: This designation includes other local land management agencies (e.g., municipal and county governments), conservation organizations and land trusts (e.g., Little Traverse Conservancy, local and National Audubon Societies, Whitefish Point Bird Observatory), and private individuals that own or manage piping plover wintering or breeding habitat or assist in protection efforts., The Nature Conservancy	Management: General	Species Expert	

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Piping Plover (Charadrius melodus)	3	6.2	Create regional interagency task forces to develop funding initiatives for recovery efforts on wintering and breeding grounds	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, U.S. Fish and Wildlife Service	Work type not yet selected	Labor type not yet selected	
Piping Plover (Charadrius melodus)	1	7.1	Develop criteria for use of population augmentation strategies on the Great Lakes population	Partially Complete	FY 2000 - FY 2004		U.S. Fish and Wildlife Service, Ecological Services Division, Research Institutions, U.S. Fish and Wildlife Service	Management: Other	Species Expert	This task should not divert funding&FRom tasks aimed at protecting the wild population or reproductive success
Piping Plover (Charadrius melodus)	2	7.241&7.242	Re-evaluate the role of zoos in piping plover conservation efforts through annual review of zoo section 10 permits; Coordinate with AZA and appropriate zoos in development of desired elements of captive breeding, rearing, or other population augmentation strategies	Partially Complete	FY 2000 - FY 2004		U.S. Fish and Wildlife Service, Ecological Services Division, American Association of Zoological Parks and Aquariums, U.S. Fish and Wildlife Service	Management: Planning	Species Expert	
Piping Plover (Charadrius melodus)	3	8	Review progress toward recovery and revise recovery tasks	Ongoing Current	FY 1995 - FY 1999		U.S. Fish and Wildlife Service, Ecological Services Division, U.S. Fish and Wildlife Service, State Wildlife Management Agencies	Management: General	Species Expert	